

CLAIMS

1. A coloured, transparent polymeric label which is capable of being fixed to a pre-selected coloured transparent region of an article (optionally by a wet glue process) to achieve a non-label look on the article, characterised in that: the colour parameters measured in CIE colour space of each of the label, labelled article and un-labelled article together satisfy conditions (a) and/or (b):

(a) (i) the modulus of ΔC is less than about 5, more preferably less than about 4, most preferably about 3.5, for example about zero, where:

$$\Delta C = C_{L+A} - C_A \quad \text{Equation 1}$$

where $C_{L+A} = (a_{L+A}^2 + b_{L+A}^2)^{1/2}$ and $C_A = (a_A^2 + b_A^2)^{1/2}$; and

(ii) the modulus of ΔL is less than about 7, preferably less than about 4, most preferably about 3, for example about zero, where:

$$\Delta L = L_{L+A} - L_A \quad \text{Equation 2; and}$$

(iii) the modulus of ΔE is less than about 10, more preferably less than about 6, most preferably about 4, for example about zero, where:

$$\Delta E = (\Delta a^2 + \Delta b^2 + \Delta L^2)^{1/2} \quad \text{Equation 3;}$$

where $\Delta a = a_{L+A} - a_L$ and $\Delta b = b_{L+A} - b_L$; and

(iv) the modulus of ΔH is less than about 7, more preferably less than about 5.5, most preferably less than about 2.5, for example about zero, where:

$$\Delta H = (\Delta E^2 + \Delta L^2 + \Delta C^2)^{1/2} \quad \text{Equation 4}$$

and/or

(b) the modulus of transmitted colour ratio (R_{trans}) is greater than 0.9 preferably is substantially about 1.0, where

$$R_{trans} = \frac{2(E_{L+A})}{(E_L + E_A)} \quad \text{Equation 5}$$

2. A label as claimed in any preceding claim, in which the label comprises a polymer film made from cellulose, a cellulose derivative, a polyolefin and/or polylactic acid.

3. A label as claimed in the preceding claim, in which the label comprises cellulose film or BOPP film.

4. A method of preparing a coloured, transparent label that can be fixed by a wet glue on to a coloured transparent article and/or region thereof to achieve a no-label appearance thereon the method comprising the steps of

(a) measuring the L a b values of the article or region thereof

- (b) using Equations 1 to 5 and the parameter limits given herein to calculating corresponding L a b values required of a label.
- (c) colouring a polymeric transparent label to have the L a b values calculated from step (b) where optionally the colouring method is selected from at least one of:
- 5 (i) colouring the label directly by incorporating dyes or pigments therein;
- (ii) applying transparent coloured compositions to either or both label surfaces;
- (iii) printing the surface of the label with pigmented or transparent inks; and/or
- (iv) colouring a clear wet glue formulation to produce coloured transparent adhesive layer when the glue is applied to the label: and/or
- 10 (v) any combinations thereof which achieve the desired total colour space values
5. A method for preparing and/or applying a label to a coloured, transparent article and/or region thereof, the method comprising the steps of:
- (a) coating a label as claimed in any preceding claim on at least one surface thereof with
- 15 an aqueous composition with an adhesive dispersed therein;
- (b) treating at least the opposite surface of the sheet, optionally both surfaces, to improve its printability,
- (c) drying the film to remove excess water;
- (d) applying the label to an article; and
- 20 (e) optionally drying the article to affix the label thereon.
6. A method of labelling a coloured, transparent article and/or region thereof, thereof with a wet glue label to achieve a no-label appearance thereon, the method comprising the steps of
- 25 (a) measuring the L a b of the article or region thereof
- (b) using Equations 1 to 5 and the parameter limits given herein to calculating corresponding L a b values required of a label.
- (c) colouring a polymeric transparent label to have the L*a*b values calculated from step (b), where optionally the colouring method is selected from at least one of:
- 30 (i) colouring the label directly by incorporating dyes or pigments therein;
- (ii) applying transparent coloured compositions to either or both label surfaces;
- (iii) printing the surface of the label with pigmented inks; and/or
- (iv) colouring a clear wet glue formulation to produce coloured, transparent adhesive layer when the glue is applied to the label: and/or
- 35 (v) any combinations thereof which achieve the desired total colour space values

(d) applying the coloured label prepared in step (c) to the measured region of the article using a wet glue to achieve thereon a labelled article having a no-label appearance.

7. A label obtained or obtainable by a method as described in claim 4.

5 8. A label facestock comprising a label as claimed in any of claims 1 to 3 or 7 adjacent a release liner.

9. A labelled article where label has a no-label appearance thereon and where the article:

10 (i) is obtained or obtainable by a method as described in claim 5 and/or 6, and/or

(ii) comprises a label as claimed in any of claims 1 to 3 and/or 7 fixed thereto with an aqueous adhesive composition.

15 10. An article as claimed in claim 9, which comprises a coloured, transparent glass or PET container.